

REMARKS

In response to the Final Office Action dated December 18, 2006, claim 1 has been amended. Claims 1, 4, and 5 are now active in this application. No new matter has been added.

Claim 1 has been amended to recite “the surface roughness (Rmax) of the setter is 5 μm or less,” as described at page 10, lines 22 and 23 of the specification.

Claims 1, 4, and 5 were rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Harris et al. (U.S. 5,424,261).

Claims 1, 4, and 5 were rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Sugiura et al. (U.S. 5,165,983).

Claims 1, 4, and 5 were also rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Japanese Document 08157365.

Claims 1, 4, and 5 were also rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Japanese Document 5-229873.

These rejections are traversed.

Claim 1 recites, in pertinent part, “the surface roughness (Rmax) of the setter is 5 μm or less, the aluminum nitride ceramic base material having an increment in warp after a single heat treatment at 850°C for one hour of not more than $2.0 \times 10^{-2} \mu\text{m}/\text{mm}$.” This smooth surface of the setter suppresses the distortion of the formed body during sintering.

Anticipation under 35 U.S.C. § 102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed Cir. 1987). Additionally, to establish *prima facie* obviousness under 35 U.S.C. § 103(a) requires that all the claim limitations must be taught or suggested by the prior art. *In re Rokya*, 490, F.2d

981, 180 USPQ 580 (CCPA 1974). At a minimum, the cited prior art does not disclose (expressly or inherently) the above recited limitation.

Harris merely discloses, “pressureless sintering,” at column 4, line 65, and “splat quenching” at column 5, line 28, and “dry pressing or sheet casting” at column 6, lines 45 and 46.

Harris does not teach or suggest the limitation, “the surface roughness (R_{max}) of the setter is 5 μm or less, the aluminum nitride ceramic base material having an increment in warp after a single heat treatment at 850°C for one hour of not more than $2.0 \times 10^{-2} \mu\text{m/mm}$ ” as recited in claim 1.

Similarly, none of the other cited art teaches or suggests the limitation, “the surface roughness (R_{max}) of the setter is 5 μm or less, the aluminum nitride ceramic base material having an increment in warp after a single heat treatment at 850°C for one hour of not more than $2.0 \times 10^{-2} \mu\text{m/mm}$ ” as recited in claim 1.

Thus, Applicant respectfully submits that claim 1 is allowable.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable.

Thus, Applicant respectfully submits that dependent claims 4 and 5 are allowable for at least the same reasons as independent claim 1.

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Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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